AFFIDAVIT

State of Ohio)
) ss
County of Franklin)

Before me, the undersigned notary, personally appeared John David Freshwater, who having first been duly sworn, deposes and says:

1. Affiant has personal knowledge of all matters set forth in this affidavit;

2. Affiant was interviewed by two investigators hired by the Mount Vernon City School District. According to the contract between the Mount Vernon City School District and the Mount Vernon Education Association affiant understands that Article 4, *Teaching Conditions,* Section 402, *Investigation of Complaints*, states, *The person against whom the complaint is made will be given the opportunity to provide a comprehensive written response to the complaint if he/she chooses to do so.* Even though I have never been a member of any union or the Mount Vernon Education Association, for the first time in my life I now understand I am protected by the union contract.

3. I was asked so many questions by the investigators that I'm glad I can go back and provide more information. When I was asked questions by the investigators I answered the best I could. I recorded my conversation with the interviewers because my attorney told me many times words can get misinterpreted or written wrong. So I taped the interview with a recorder. I've listened to the tape many times after the interview – at least ten times. I do not like the sound of my voice and all the um's and ah's I use when I speak. Each time I listened to the interview recording I thought of more stuff I wanted to add. So I am glad I can write a statement to help explain stuff in case you investigators do not ask me certain questions when we meet again next week on Wednesday on May 28, 2008. Because it is just my nature or habit to answer questions by repeating the question, it is my understanding I am to write and speak as if I were writing a letter or giving a speech to the world to explain things. It is my understanding I am trying to speak and write so that people could not misunderstand what I am saying. I know when I speak I am thinking of a million things and sometimes what I say can be confusing so it is my understanding to think, write and speak with a goal of communicating as clearly as I can.

4. You asked me about the word "here" and how I use that in my class with my students. It's important to know that I use "here" to help students understand the difference between concrete versus abstract thinking - to overcome the difference between concrete and abstract thinking. One of my standards is to teach the scientific method and scientific ways of knowing. I got like 34-35 standards to teach. Let's count them. On page 215 of my green Academic Content Standards book one of my standards is to teach students to *identify the difference between description (eg, observation and summary) and explanation (eg, inference, prediction, significance and importance).* I use "here" to get kids to recognize the difference between a modern day fact and a science fact.

Science facts sometimes require inferences. Like an example of a modern day fact would be I was born on June 22, 1956. If today is May 22, 2008, I would be 51 years and 11 months old. Me being 51 years and 11 months is a definite fact. Somebody was there when I was born and somebody is here now to show that I am exactly 51 years and 11 months old. That's a fact. But science and scientific ways of knowing requires abstract thought sometimes. Like when we say the Earth is 4.6 billion years old. Here in my red astronomy science book on page 50 it states the Earth is 4.6 billion years old. In this green science book on cells and heredity on page 138 it says the same – 4.6 billion years. 8th grade students sometimes can't grasp what it means to say that. Scientifically they want proof. I have heard them ask how do we really know it is 4.6 billion years old. I explain science requires us to make inferences. Inferences are part of the scientific method. Inferences are good and necessary to get to science facts. Inferences are getting an idea from our observations. The differences between abstract thinking and concrete thinking are important to explain so kids trust the material and the scientific method. Concrete thinking is based upon certainty. Abstract thinking is based upon inferences like in Bloom's taxonomy and the higher thinking needed to get to the top of Blooms. Think of it like this – on one side you have mathematical facts and on the other abstract side you have extrapolated evidence progression towards a theory. Concrete is definite but abstract can be an observation, a hypothesis or a theory. Concrete is like my age – you can see it and determine it in present time but abstract thinking needs evidence extrapolation forward or backward in time. Take the moon landing. Some people claim man never landed on the moon. But because we have pictures, people were there, people watched it happen – people are more willing to accept and trust that the moon landing occurred because we had eye witnesses. But on the other hand – like in this green science book on pages 138 and 139 – students don't trust the statement that Earth is 4.6 billion years old. Why? Because nobody was there. I let the kids use "here" to acknowledge their challenge to the statement but then tell them the scientific method requires we extrapolate to get to the scientific fact by inference. You'd be amazed how many students challenge this material because they believe GOD over the process of scientific method. I'm not there to preach to them so I just teach the scientific method. Like here where it states (green p139) *scientists hypothesize that under these conditions, life developed from nonliving matter. In other words, life started from the chemicals that already existed in the environment.* And then over here (red p50-51) it talks about the Earth's first and second atmosphere. 8th grade students are strong-willed and very concrete in their thinking. I have to explain that science is about asking questions and making observations then forming a hypothesis. You test the hypothesis analyze the hypothesis testing then make conclusions. This process goes over and over until you reach the level of a theory. Some theories become laws. Science laws are indisputable. When a science law is stated that means there is nothing to dispute the science law.

5. "Here" became a teaching strategy for me back in the late 90's. For me it was an aha moment where I saw what the students were struggling with scientific method. It was 97, 98, 99, something like that when two students gave me a better glimpse into the analytical thinking of the 8th grade student. This female student whose name begins with a "c" or a "k" created some handouts. It looked like she copied them from somewhere. She gave them to me as a quiz for me – I was supposed to take the quiz for her. She gave

me these after like the first or second class after we discussed evolution. My impression was that she was challenging evolution by giving me the handouts. I remember reading it and thinking "Wow!" this girl is entrenched in her thoughts how do I get her to think abstractly about evolution. I put her writing on an overhead and shared it with the class and explained that evolution requires abstract thought and that as they got older they would need to think bigger and deeper – the BIG picture. Within the same time period – give or take a few weeks – another student, a boy, got really agitated – almost upset – and he made me come over to his desk and said "right here" this is not right and he was pointing to the book we were using. Now, the book he was pointing to was a textbook we don't use anymore. We have new ones that I've showed you. You know I specifically remember it was the year Dr. Weston gave us that handout telling us to teach evolution. My students are from all learning levels from the really smart to the challenged. They ask all kinds of questions and there was this repeated pattern of questioning by the students that was confrontational and challenging. When this boy got upset about whatever it said in his book. It hit me. Whenever a kid wants to challenge the abstract they can shout out "here" and we would either simply acknowledge or actually talk about their challenge which allowed me to emphasize the difference between concrete and abstract thinking. So, to keep the students trust I worked with their challenging questions by talking to them. It worked the rest of that year and I began using the word "here" ever since as a way of respecting the simple thought process of the students but letting them trust me to develop their abstract thinking by extrapolating "science facts" to their simple way of thinking about "facts".

6. I have been teaching 8th grade students for 20+ years. This age group has difficulty understanding the difference between concrete thinking and abstract analysis. Students would ask questions or ask questions that were very concrete because they failed to think in the abstract. My classes had been getting bogged down by questions and I was losing teaching time because kids would be hostile to the evolution. My teaching strategy works because I acknowledge their cynicism about "science facts" and respect their thoughts when they shout "here" but at the same time my class keeps moving and more importantly the kids trust me when I teach them about the "science facts". The best way to put it is my students were challenging material I was teaching because the students were operating within their smaller - limited belief and understanding system. I finally recognized that was their hurdle which is my hurdle. So I let the kids speak their peace which then made them more open to what the textbook and lesson plan taught.

FURTHER AFFIANT SAYETH NAUGHT.

John Freshwater

The foregoing affidavit was sworn to and acknowledged before me this May 25, 2008, by John David Freshwater, who is personally known by me or who provided satisfactory identification and who did swear to the truthfulness of the above.

Notary Public

NOTARIAL SEAL STATE OF OHIO

R. KELLY HAMILTON, ATTORNEY AT LAW
Notary Public
In and for the State of Ohio
My Commission Has No Expiration Date
Section 147.03 R.C.